

In the Matter of Emergency Communications  
by Amateur Radio and Impediments to  
Amateur Radio Communications

By W. Lee McVey, P.E. W6EM

To: The Commission

FCC Docket No. GN-12-91

I offer the following as my Reply to the Comments of Donald Schellhardt, Esquire, President of Hams for Action (HFA), in the above captioned proceeding. I am formerly a member of HFA and resigned from it in 2005. Although I resigned from HFA, I still fully support, in concept, the direction and purpose of the organization. Especially its proactive approach to the problem of amateur antenna restrictions. This Reply is offered at this time since there is not a formal Reply Date in this proceeding and a response has not been received by the time of this filing to my Motion to request same filed on May 4, 2012.<sup>1</sup>

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## I. Introduction

1. I want to begin by thanking HFA for its being first to take the bold step of defining what truly would be a reasonable antenna. Until HFA was formed, only the familiar phrase *reasonable accommodation* was heard with which to defend an amateur operator's antenna intentions. Although *reasonable accommodation* is codified as a definition, it was done so with the *barn door wide open* to interpretation.<sup>2</sup> It does not, in any way, define what is *reasonable*. Amateur radio "horror stories" abound to this day, describing what many local governments consider to be a reasonable accommodation as *nothing visible at all*. At least for antennas that could be installed or erected without first obtaining approval via an *expensive* and often *untimely* municipal permitting process. For instance, in the case of Holmes Beach, Florida, it enforces what it believes to be reasonable, codified limitations for antennas. Antennas may not be installed on residential structures<sup>3</sup> and antennas must be painted.<sup>4</sup> A *Special Exception Building Permit* is required for any antenna to be installed more than 35 feet above ground level.<sup>5</sup> Further clarification of what constitutes a *reasonable accommodation*, to say nothing of a *reasonable antenna*, is sorely needed, along with stronger federal enforcement. What good would additional regulations be if current federal regulations are simply ignored without recourse?

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<sup>2</sup> 47CFR§97.15(b)

<sup>3</sup> Holmes Beach, Florida *Code of Ordinances*, Art. **XI**, Section 11.4(A)(3).

<sup>4</sup> *Ibid*, Art. **XI**, Section 11.4(B)(1)(b).

<sup>5</sup> *Ibid*, Art. **XI**, Section 11.8(A)(1).

## II. Defining What Is Reasonable

2. Turning back to HFA's reasonable antenna definition, it establishes a limit for its definition without a basis for what it suggests.<sup>6</sup> Since common lightning rods seldom exceed three feet in height above roof ridgelines, it would have some footing in that regard. A comparative example of equivalent negative aesthetic impact, were it not for the fact that most ridgeline lightning protection systems do not consist of just one rod, but instead are usually an array of rods spaced equidistantly along a roof ridgeline. Also, where a three-foot limit would be practical for a 144MHz or higher frequency, un-loaded vertical radiator; the radiation efficiency of a wire antenna, with the same elevation limit, would be more seriously impacted. Further, a virtual "picket fence" of lightning rod air terminals would be much more aesthetically negative in appearance than would be an American Wire Gauge Number 14 (0.064 inch approximate diameter) copper-clad steel antenna wire running somewhat horizontally at any height above structure roof ridgeline. HFA concedes, however, that the effectiveness of a wire antenna would be limited at such a low elevation and that a consensus on the limitation does not exist among its present membership.<sup>7</sup>

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<sup>6</sup> HFA Comments, Page 4.

<sup>7</sup> *Ibid*, Page 5.

3. A better solution might be not so much a height limit as would be antenna location. That being preferably behind residential structures; and, to the extent possible, sight-screened by trees or through use of other structural components. Something like a simple or compound pipe-mast, as a midpoint support, painted a dark color, with ends of wire antennas sloping down and away from the mast. A description of what is commonly known as an “inverted-vee” dipole-type antenna. A reasonable vertical antenna could be described as one vertical element supported on either a structure or on top of a properly-guyed-and-anchored pipe-mast, with an overall permissible height based on fallover-footprint<sup>8</sup> concerns.

### III. Preconditions Could Become Impediments

4. The HFA suggestion that outside antenna permission be granted only to those who are “Technical Innovators” (TIs) or possess current certification in emergency operation activities<sup>9</sup> could prove to be added impediments to amateur radio unless broadly defined. A TI could be a child who wishes to experiment by building a kit radio and, as a result, develops an interest in amateur radio. Or, it might be a college graduate who proposes something new by virtue of a petition before the Commission. In either case, perhaps, it could be a *cart before the horse* with respect to lifting restrictions. If the amateur service is to continue as an incentive for young people to learn about and develop skills in electronics and radio communications, the preemption of antenna restrictions must precede, not follow if technical interest or innovation is to be developed

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<sup>8</sup> A *fallover-footprint* being defined as the overall length of the antenna and structure as a radius in a perimeter, should it collapse by falling over intact from its base.

<sup>9</sup> HFA Comments, Page 6.

through participation. Actually, technical interest is a given in the first place, considering the nature of the Amateur Radio Service as one must learn technical basics in order to obtain a license. Obtaining a license or certification should automatically lift antenna restrictions so that technical innovation can follow.

5. Emergency organization membership to gain preemption could be an added impediment, depending on the organizational requirements. For instance, if a precondition, a newly licensed person who might wish to operate a high frequency digital station may not be a member of the Military Auxiliary Radio Service (MARS) or the Amateur Radio Emergency Service (ARES), yet would have to be in order to erect an outside antenna to operate. In the case of MARS, one must first *certify operational capability* before membership is granted. I am not certain about ARES, as there has been confusion about whether or not membership in the American Radio Relay League (ARRL) is a requirement in order to participate. However, one can become a member of ARRL and local amateur radio organizations without being able to operate. A commitment by a licensee to participate in emergency activities should be all that is necessary for removal of antenna restrictions.

6. A limited-basis preemption may impact fulfillment of other purposes of the Amateur Radio Service.<sup>10</sup> For instance, the purpose of promoting international goodwill was not mentioned. Perhaps understandable while in discussions with a national homeowner association organization, since they might not understand the relevance and value of international goodwill. Sustenance of international goodwill is of great value to

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<sup>10</sup> 47CFR §97.1, *et. seq.*

the United States. Especially when combined with emergency-related activities during worldwide disaster relief and recovery, as was recently the case following the massive earthquake in Haiti. Participation in on-the-air “DX” contests and special assistance networks<sup>11</sup> establishing contact with international stations demonstrates operational capability that such communications could take place if needed following disasters either here or overseas. An amateur station cannot conduct dependable international communications without a simple, effective, outdoor antenna at an adequate elevation.

#### IV. An Affirmation of Purpose

7. What is needed is some sort of augmented certification of purpose to the initial licensure and renewal process. A formal commitment to meet the purpose(s) of the Amateur Service.<sup>12</sup> Something as simple as an affirmation, as part of the license application process, by which an applicant certifies that he or she will strive to meet the codified purposes of the Amateur Service. Such a promise should be all that is needed to enable federal preemption of private use land contract antenna restrictions. Something as straightforward as the loyalty oath I had to attest to in 1961 to obtain then-Commission Secretary Ben F. Waple’s signature on my newly-minted novice class license. Or, perhaps a reinstatement of the requirement to spend at least a reasonable minimum number of hours of on-the-air operation to renew an amateur license. An affirmation to fulfill the purposes of the amateur service by becoming an active, contributing amateur

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<sup>11</sup> National Hurricane Center Nets and the International Maritime Mobile Service net on the amateur 20 Meter band.

<sup>12</sup> 47CFR§97.1 *et seq.*

operator. If it were to become widely known that preemption of private land use antenna restrictions follows licensure, that fact alone would encourage those who may wish to obtain their licenses and fulfill the purposes of the United States Amateur Radio Service.

V. Summary

8. HFA has taken the affirmative in suggesting a reasonable approach to the difficult task of balancing an amateur operator's need for an effective, outdoor antenna and the need for some form of aesthetic consideration within housing developments. And, at the same time, fulfilling national interests in the Amateur Radio Service. Our best outcome, I believe, is that through such a process, a truly reasonable solution to the difficult task of antenna accommodation can be found.

Respectfully Submitted this 11<sup>th</sup> day of May, 2012

A handwritten signature in blue ink, appearing to read "W. Lee McVey".

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Certification/Testament of Service

This is to attest that on the 11th of May, 2012, the undersigned placed a true, signed copy of this Reply in the United States Mail, First Class Postage Paid, addressed to the location given in the Docket Record as follows:

Donald Schellhardt, Esq., President  
Hams For Action  
3250 East Main Street #48  
Waterbury, CT 06705

A handwritten signature in blue ink, appearing to read "W. Lee McVey", is written over a light blue rectangular background.

By \_\_\_\_\_

W. Lee McVey, P.E.